

Efficient Cells Cut the Cost of Solar Power



Glenn Research Center

***GreenField Solar Inc.
Oberlin, OH***

NASA Technology

- ◆ Solar power has great potential for increased use both on Earth and in space.
- ◆ Glenn has taken interest in research that creates cheaper, more efficient photovoltaic (PV) chips to harness the sun's energy.



Technology Transfer

- ◆ Through a Space Act Agreement, a former Glenn scientist worked with NASA to develop the StarGen system, a technology where sunlight is reflected by powerful mirrors onto small PV chips.
- ◆ The StarGen system provides 200 times more power than conventional panels for a given amount of silicon.

Benefits

- ◆ The diminutive PV chips require less silicon, making them cheaper to produce than conventional panels.
- ◆ Excess thermal energy can be used to heat office buildings and greenhouses.
- ◆ The company employs 30 workers and expects to hire more as it expands globally.